

A Composition for Diabetic Wound Treatment

TECHNOLOGY DESCRIPTION

This technology is a refined method of healing wound in diabetic patients by administering a formulation consisting of an aqueous fraction of *Moringa oleifera* leaves as the sole active ingredient.

TECHNOLOGY FEATURES

This method was found to enhance wound contraction rate and decrease wound area and epithelization period thereby, contributes to rapid healing/closure of wound. Patients with diabetes mellitus stages 1 and 2 can benefit from wound treatment using this product. It can also be consumed by those who have yet to contract diabetes (stage 0) and to promote healthy living. This product can be administered topically. It also possesses anti-inflammatory, antioxidant and angiogenic activity which promotes wound healing in hyperglycemic rats. Raw materials are sourced locally which are cheap and affordable. Hence, this product can be produced at lower cost and affordable to the general public.

ADVANTAGES

- High prevention of diabetes
- Safe
- Cost effective
- Natural product with non-synthetic material

INDUSTRY OVERVIEW

Prospect Industry: Wound care products for diabetic patients, Wound care supplies

The present invention is considered a topical pharmaceutical product that promotes diabetic wound healing. In general, this invention has potential to be marketed in local and global wound care market. The global wound care market is expected to reach USD 20.4 billion by 2021 from USD 17.0 billion in 2016, growing at a CAGR of 3.6% from 2016 to 2021. However, factors such as high costs of advanced wound care products may restrain the market growth; especially in the cost-sensitive market. North America dominates the wound care market with the U.S. accounting for the major market share. Asia is poised to grow at the highest CAGR during the forecast period, owing to the increasing awareness for wound care products, rising aging population, rising diabetic wounds due to changing lifestyle factors, and growing population with pressure ulcers. Furthermore, many players are focusing on the market in Asia. The prominent players in the wound care markets are 3M Company (U.S.), Baxter International, Inc. (U.S.), Coloplast A/S (Denmark.), Convatec Healthcare B.S.A.R.L (U.S.), Covidien PLC (Ireland), Derma Sciences, Inc. (U.S.), Ethicon, Inc. (U.S.), Hollister, Inc. (U.S.), Ethicon, Inc. (U.S.), Acelity L.P/ (U.S.), Mölnlycke Health Care (Sweden), and Smith & Nephew (U.K.).



Assoc. Prof. Datin Dr. Sharida Fakurazi
Faculty of Medicine and Health Sciences